

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☒

2. NAME OF OPERATOR

Chuska Energy Co.

3. ADDRESS OF OPERATOR

c/o 3E Co. Inc., Box 190 Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface 1530' FNL & 550' FEL

At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

5120

17. NO. OF ACRES ASSIGNED

TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

5670

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4860 GR

22. APPROX. DATE WORK WILL START\*

August 15, 1984

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17	13 3/8	54.5	100	See attached cement information
12 1/4	8 5/8	24	1300	
7 7/8	5 1/2	15.5	6030	

SEE ATTACHED

RECEIVED

JUL 16 1984

DIVISION OF OIL  
GAS & MINING

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE: 7/20/84  
BY: John R. Baya

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

John Alexander

TITLE Agent

DATE July 11, 1984

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

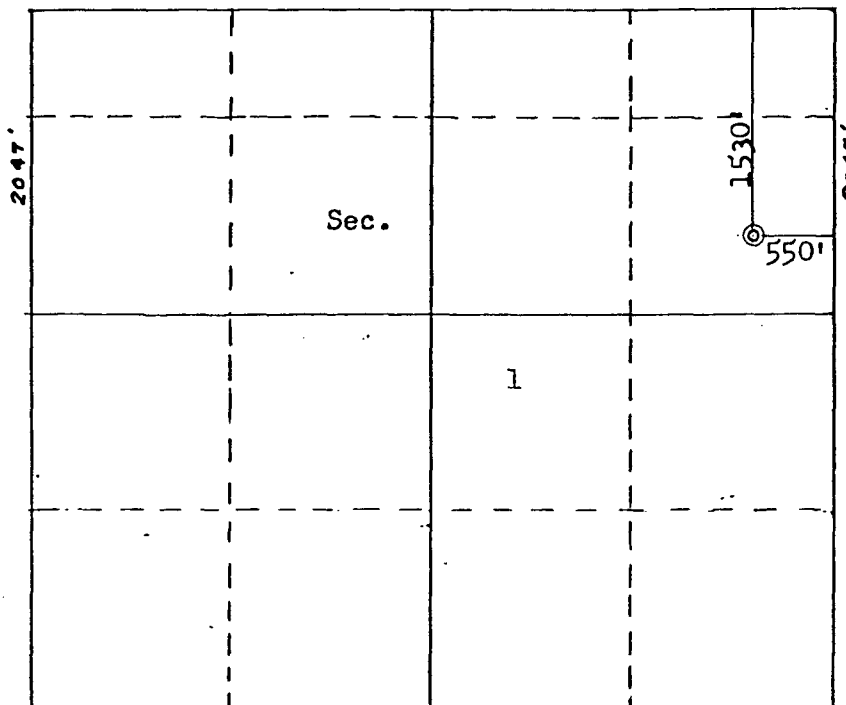
COMPANY HUSKA ENERGY COMPANY

LEASE NAVAJO TRIBAL WELL NO. 42-1

SEC. 1, T. 41S, R. 22E  
San Juan County, Utah

LOCATION 1530'FNL 550'FEL

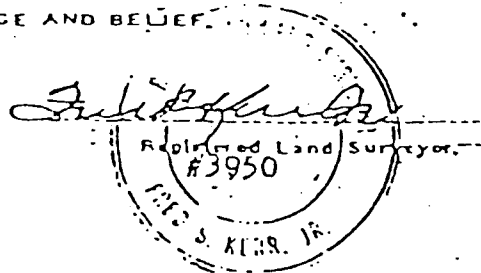
ELEVATION 4860 ungraded ground



SCALE—1 INCHES EQUALS 1 MILE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTE OF ACTUAL SURVEYS, MADE BY ME UNDER MY SUPER-  
VISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

SEAL:



SURVEYED May 22, 1984

FARMINGTON, N. M.

FORMATION INFORMATION AND  
DRILLING PRACTICES

CHUSKA ENERGY CO.  
Navajo Tribal No. 42-1  
1530' FNL and 550' FEL  
Sec 1, 41S, 22E  
San Juan Co., Utah

1. Surface Formation: Bluff Sandstone

2. Estimated Formation Tops:

Navajo	830'	Organ Rock	2825'
Keyenta	1160'	Cuttler	3730'
Windgate	1260'	Hermosa	4800'
Chinle	1680'	Upper Ismay	5660'
Shinarump	2360'	Lower Ismay	5780'
Moenkopi	2460'	Desert Creek	5890'
Dechelly	2705'	T.D.	6030'

3. Estimated Depth of Anticipated Oil, Gas Water or Minerals:

Oil	5780'
Oil	5890'

4. Proposed Casing Program:

0-100'	13 3/8", 54.5 lb/ft, ST & C J-55 new casing; cement with 120 cubic feet Class "B" + 2% CaCl <sub>2</sub> + 1/4 lb celophane flakes per sack.
0-1300'	8 5/8", 24 lb/ft, ST & C K-55 new casing; cement with 800 cubic feet 65-35 poz mix + 2% CaCl <sub>2</sub> . Cement will be brought to surface.
0-6030'T.D.	5 1/2", 15.5 lb/ft, ST & C, K-55 new casing; cement with 450 cubic feet 50-50 poz mix + 2% CaCl <sub>2</sub> + 10% salt + 0.8% fluid loss additive. Cement top at 4000'.

5. Pressure Control Equipment - Blow Out Preventor:

The attached schematic shows the type of blowout preventor to be used while drilling. The unit will be tested to 800 psi prior to drilling from under surface pipe.

6. Drilling Fluids:

DEPTH	TYPE	VIS.	WEIGHT	FLUID LOSS
0-1300'	Gel-lime	35-45	9.0	Not controlled
1300-4000'	Gel-chem	35-45	9.5	15cc
4000-6030'	Low solids	45-50	10.0	9cc

7. Auxiliary Equipment:

- Bit float
- Stabbing valve to be used in drill pipe when kelly is not connected.

8. Logging - Coring - Testing Program:

Logging - Open Hole : IES, CNL, FDC  
Mud : 4000' to t.d.

Testing : possible in Lower Ismay and Desert  
Creek

Coring : None planned

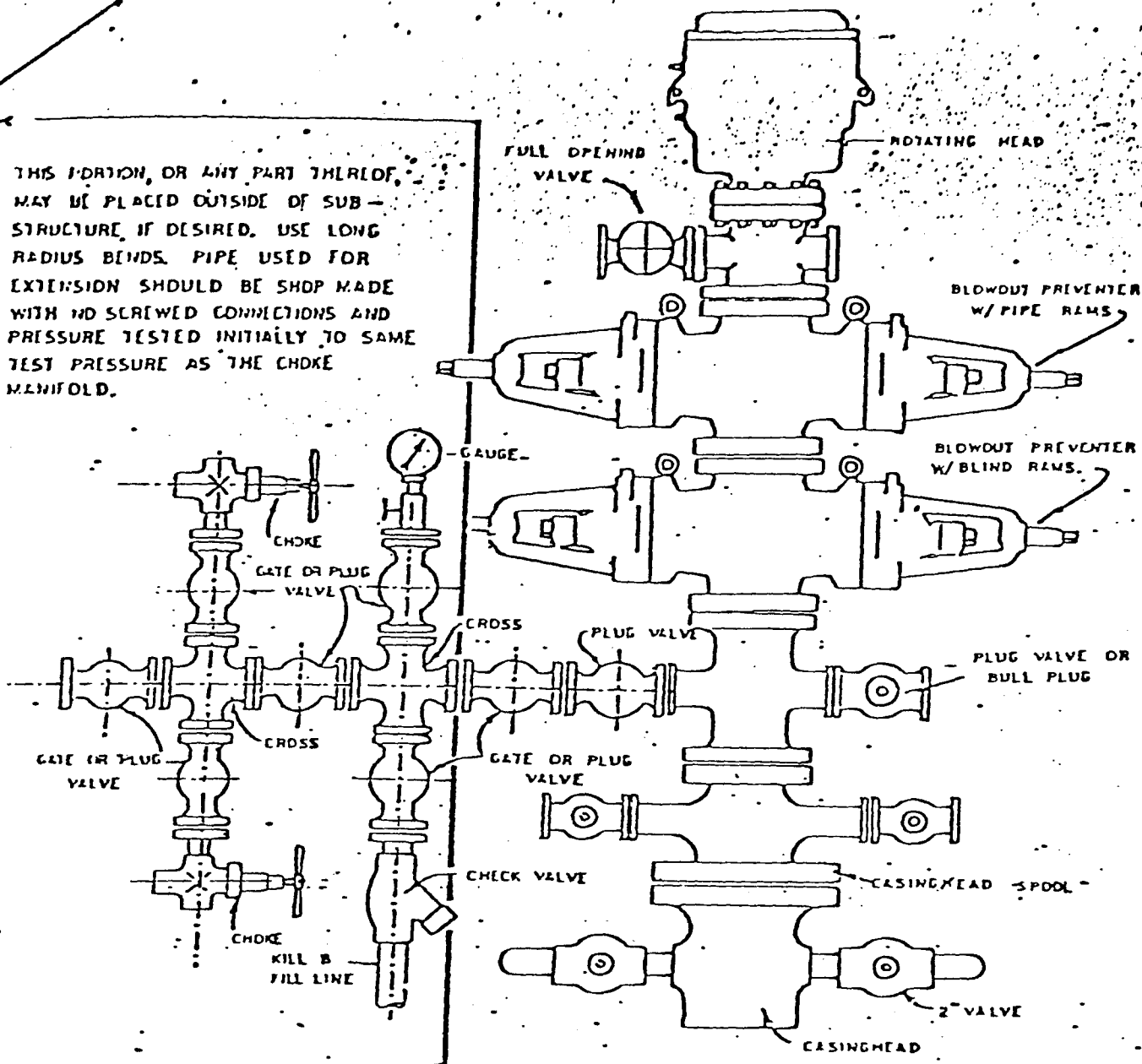
9. Abnormal Temperatures, Pressures or Potential Hazards:

None Expected

10. Starting Date:

Anticipated starting date is August 15, 1984. Approximately 5 days will be required to build roads and location. Drilling will take about 15 days. Completion should be accomplished in 6 days.

THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE, IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH NO SCREWED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOKE MANIFOLD.



BLOWOUT PREVENTER HOOKUP

SURFACE USE PLAN

CHUSKA ENERGY CO.  
Navajo Tribal No. 42-1  
1530' FNL and 550' FEL  
Sec 1, 41S, 22E  
San Juan Co., Utah

1. Existing Roads (shown in green)

The attached topographic map shows all existing roads within one mile of the proposed location. The access road will join a secondary road leading to an existing county dirt road. The county and secondary road will bear normal drilling traffic and not have to be upgraded.

2. Planned Access Road (shown in red)

The new access road will run South from the existing secondary road approximately 1/4 mile to the well site. Maximum grade will be 10%. Water bars will be used to prevent erosion.

3. Location of Existing Wells

All existing oil, gas, water, drilling and disposal wells are shown on the attached topographic map.

4. Location of Tank Batteries, Prod. Facilities & Prod. Gathering & Service Lines

All production facilities are to be contained within the proposed location site. The operation has no other facilities in the area.

5. Location and Type of Water Supply

Water will be trucked from the San Juan River, 2 miles north of the location.

6. Source of Construction Materials

Any gravel or other construction material that can not be obtained from the excess accumulated from building the location will be purchased from the Navajo Tribe.

7. Methods of Handling Waste Disposal

All trash will be carried to a land fill or burned. All nonburnable materials (drilling fluids, cuttings, chemicals) will be stored in the reserve pit and then buried when they have dried. Any oil produced while drilling will be trucked from the location prior to leaving pit to dry out. Pits will be completely fenced during drying time, then backfilled with dirt prior to preparing the location for production or abandonment.

8. A portable chemical toilet will be supplied for human waste.



9. Ancillary Facilities - No ancillary facilities are planned.

10. Well Site Layout - The attached layout shows the drilling rig with all associated facilities. Cut and fill required is also indicated.


11. Plans for Restoration of Surface

Restoration of the wellsite and access road will begin within 90 days of well completion, weather permitting, and if required by private land owner. Should well be abandoned, the drilling site will be reshaped to its approximate former contour. The access road will be plowed up and leveled. Both drillsite and road will have any topsoil replaced and will be reseeded when germination of seeds can take place. In either case, cleanup of the site will include burning of any safely burnable material, filling of all pits, carrying away of all nonburnable material and any chemicals that cannot be safely buried, and the hauling off of any oil that may have accumulated on the pits while drilling. A burn permit will be acquired if necessary.

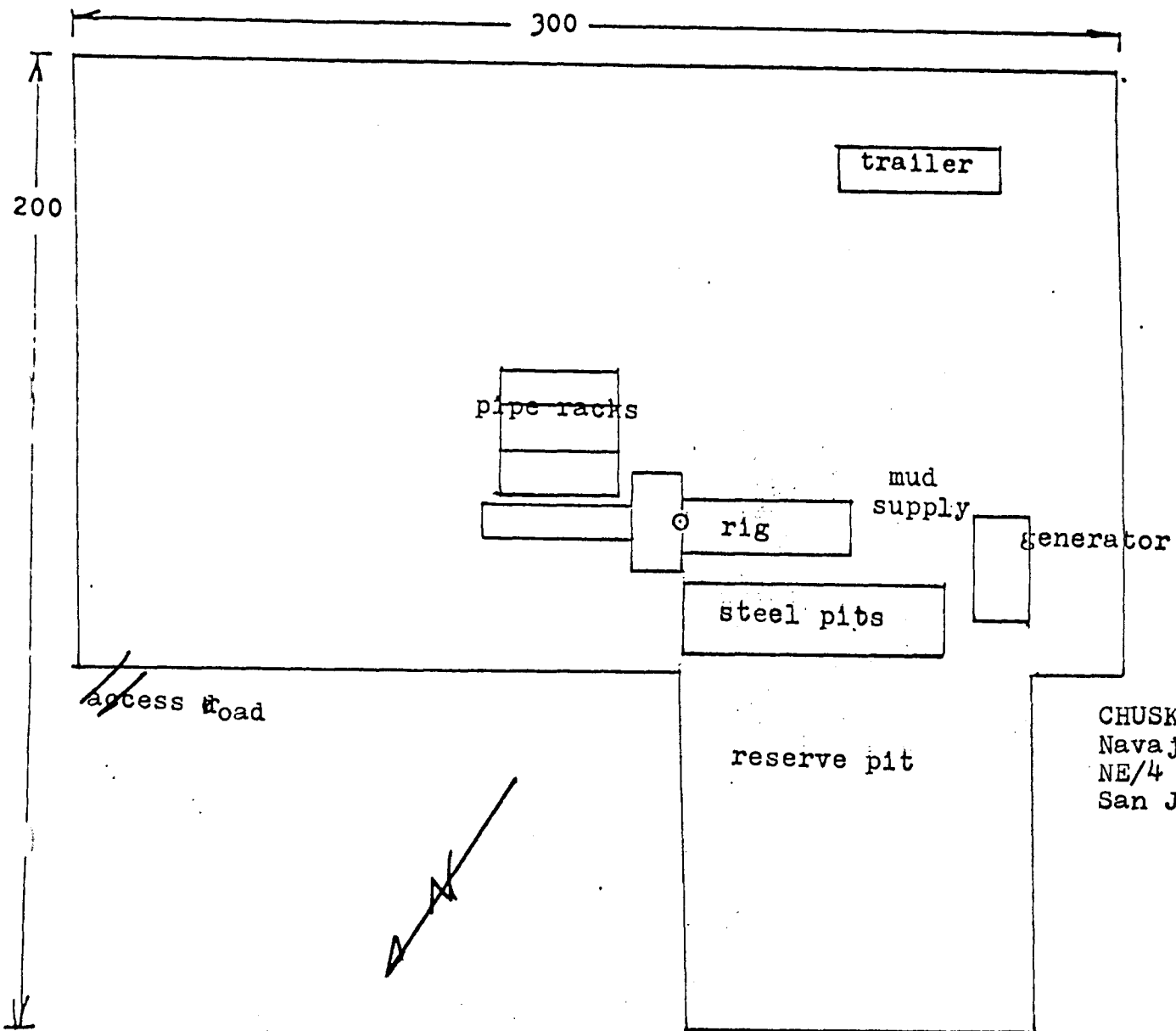
12. This location is approximately 2 miles south of the San Juan River. It is just south of an existing well whose access will be used for this well. No artifacts were found in the area. There are no residences in the immediate area.

13. John Alexander  
3E Company, Inc.  
P.O. Box 190  
Farmington, NM 87499  
Phone: 505-326-1135

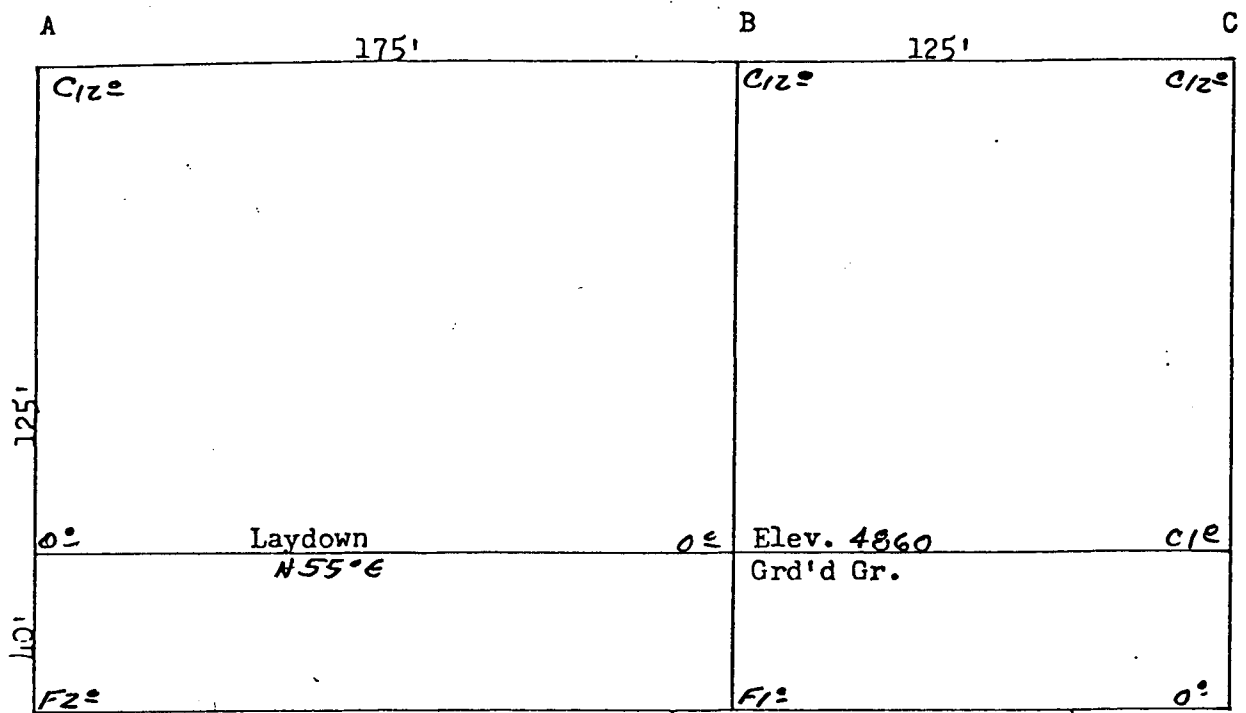
14. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Chuska Energy Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
-----  
JOHN ALEXANDER  
July 10, 1984

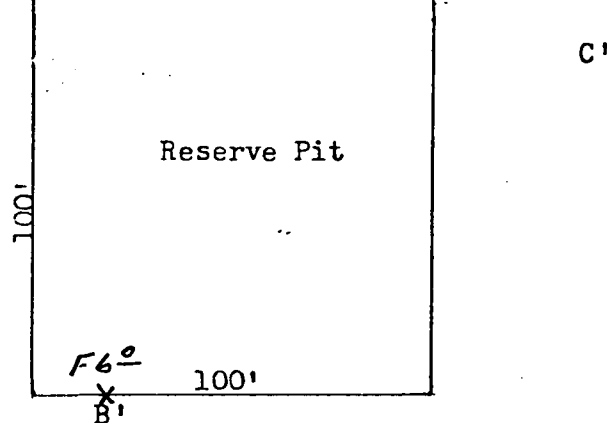
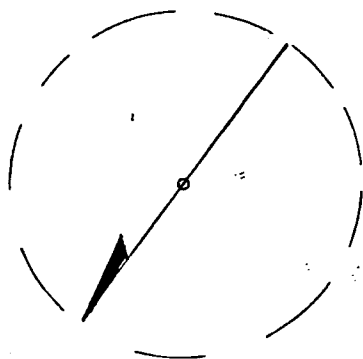
JA:kj



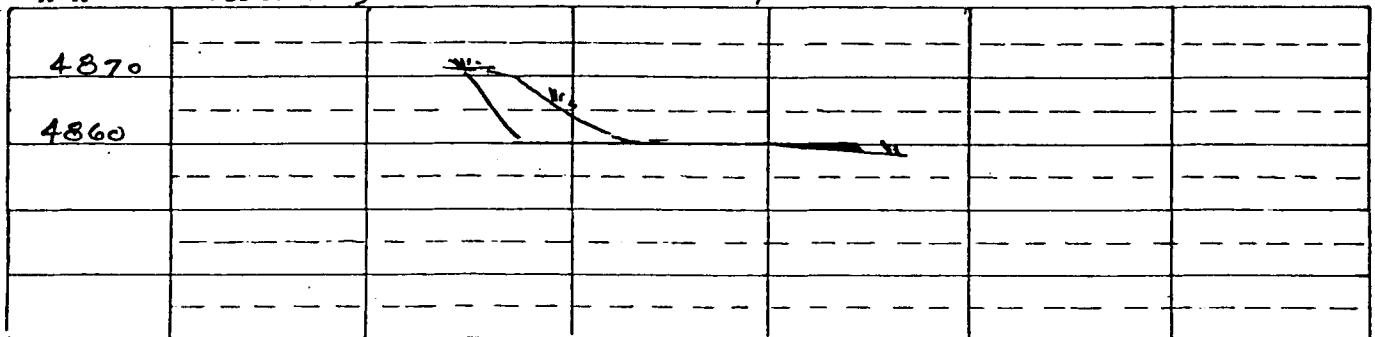
CHUSKA ENERGY CO.  
Navajo Tribal 42-1  
NE/4 1-41S-22E  
San Juan, Utah



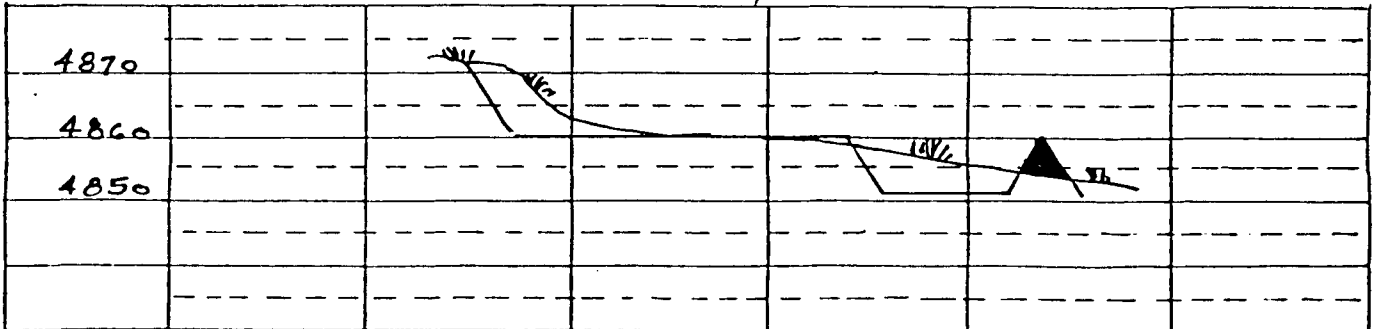
A' Scale: 1"=50'



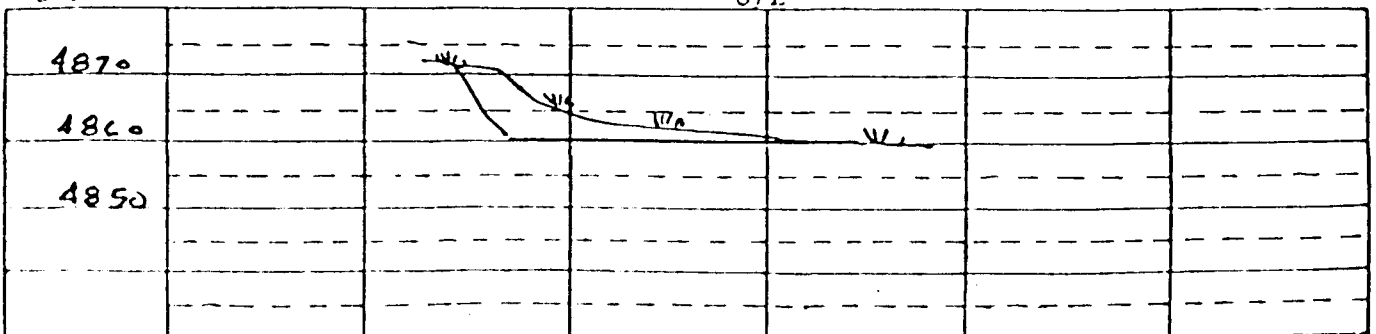
A-A' Vert: 1"=30' Horiz: 1"=100' C/L

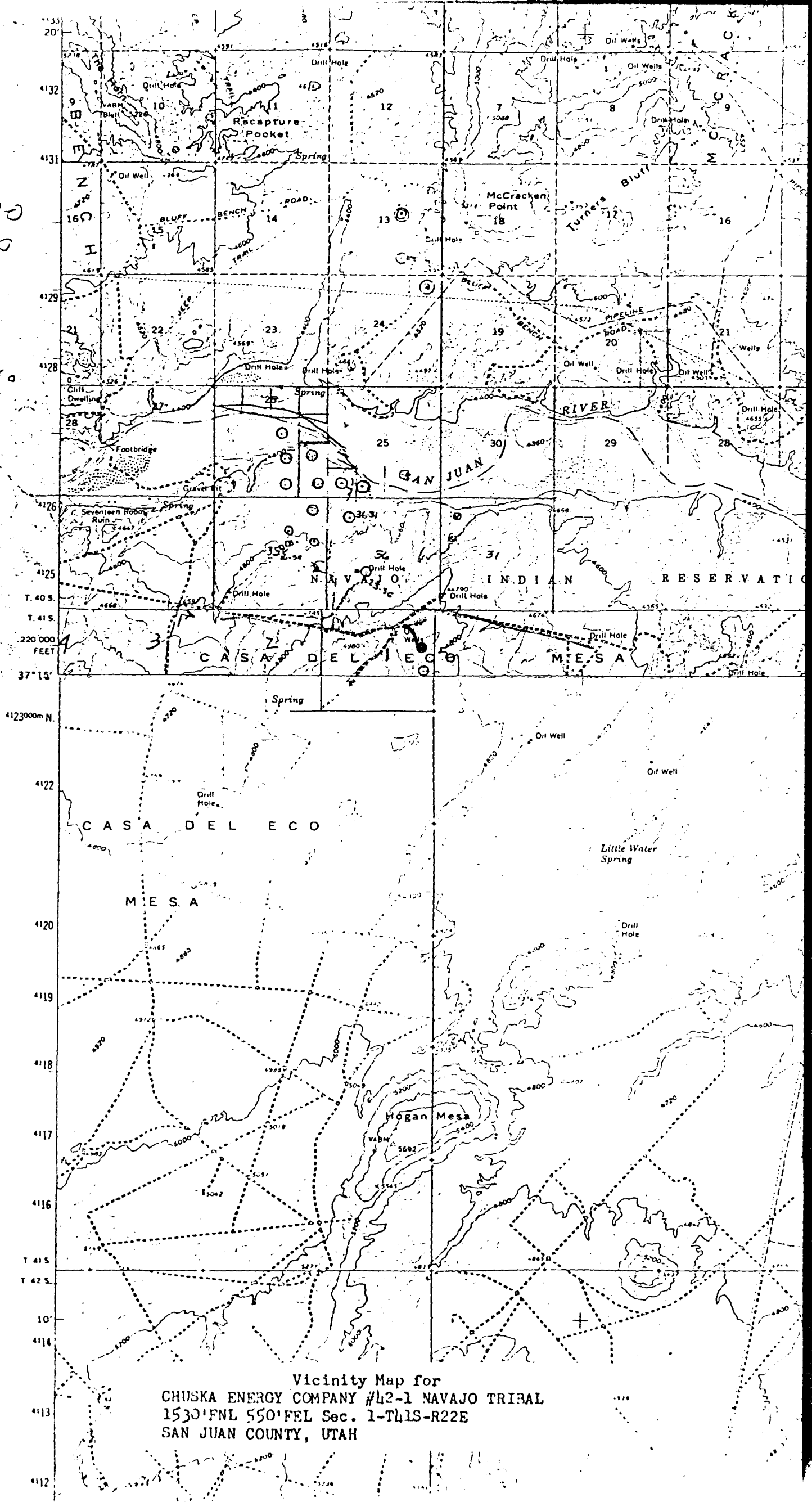


B-B' C/L



C-C' C/L





OPERATOR Chuska Energy Co. DATE 7-18-84

WELL NAME Marajo Initial #42-1

SEC SE NE 1 T 41S R 22E COUNTY San Juan  
Irregular Section

43-037-31040  
API NUMBER

Indian  
TYPE OF LEASE

POSTING CHECK OFF:

☐ INDEX

☐ HL

☐

☐ NID

☐ PI

☐

☐ MAP

☐

☐

PROCESSING COMMENTS:

No other wells within 1000'  
Need water permit

APPROVAL LETTER:

SPACING: ☐ A-3 UNIT

☐ c-3-a CAUSE NO. & DATE

☒ c-3-b

☐ c-3-c

SPECIAL LANGUAGE:

1- Water

2- Blowout prevention equipment with a minimum  
of 3000 psi working pressure should be used after  
drilling out of 8 5/8" casing.

☒ RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

☒ AUTHENTICATE LEASE AND OPERATOR INFORMATION

☒ VERIFY ADEQUATE AND PROPER BONDING

☒ AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

☐ APPLY SPACING CONSIDERATION

☐ ORDER \_\_\_\_\_

☐ UNIT \_\_\_\_\_

☒ c-3-b

☐ c-3-c

☒ CHECK DISTANCE TO NEAREST WELL.

☐ CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.

☒ IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

☒ IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

July 20, 1984

Chuska Energy Company  
c/o 3E Company, Inc.  
P. O. Box 190  
Farmington, New Mexico 87499

RE: Well No. Navajo Tribal 42-1  
1530' FML, 550' FEL  
SENE Sec. 1, T. 41S, R. 22E  
San Juan County, Utah

Gentlemen:

Approval to drill the above referenced oil well is hereby granted in accordance with Rule C-3 (b), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.
2. Blowout prevention equipment with a minimum of 3000 psi working pressure should be used after drilling out of 8 5/8" casing.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 533-5771, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

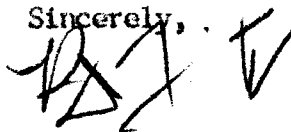


Page 2  
Chuska Energy Company  
Well No. Navajo Tribal 42-1  
July 20, 1984

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31040.

Sincerely, .



R. J. Firth  
Associate Director, Oil & Gas

RJF/as

cc: Branch of Fluid Minerals  
Bureau of Indian Affairs

Enclosures

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API #43-037-31040

NAME OF COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: NAVAJO TRIBAL #42-1

SECTION SE NE 1 TOWNSHIP 41S RANGE 22E COUNTY San Juan

DRILLING CONTRACTOR Four Corners

RIG # 9

SPUDDED: DATE 4-16-85

TIME 7:00 PM

How Rotary

DRILLING WILL COMMENCE

REPORTED BY John Alexander

TELEPHONE # 505-326-5525

DATE 4-17-85 SIGNED AS

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0135  
Expires August 31, 1985

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		<b>RECEIVED</b>  APR 22 1985  DIVISION OF OIL GAS & MINING	5. LEASE DESIGNATION AND SERIAL NO. NOG 8308-1033
2. NAME OF OPERATOR Chuska Energy Company			6. IF INDIAN, ALLOTTEE OR TRIBE NAME NAVAJO
3. ADDRESS OF OPERATOR P. O. Box 2118, Farmington, N.M. 87499			7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1530' FNL & 550' FEL			8. FARM OR LEASE NAME NAVAJO TRIBAL
14. PERMIT NO.		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4860' Gr.	9. WELL NO. 42-1
			10. FIELD AND POOL, OR WILDCAT ANETH
			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 1-41S-22E
			12. COUNTY OR PARISH San Juan
			13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input checked="" type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) \*

✓ Four Corners Drilling Company Rig No. 9 Spudded 17 1/2" hole at 1900 hrs. 4/16/85. Drilled to 83'. SET 13 3/8" 48 lb. conductor pipe at 81' and cemented with 118 cu. ft. class "B" containing 3% Ca Cl 2 and 1/4 lb. celophane flakes/sk. Job complete 0115 hrs. 4/17/85.

18. I hereby certify that the foregoing is true and correct

SIGNED

*John Alexander*  
John Alexander

TITLE Agent

DATE

4/17/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE  
(Other instructions on reverse side)

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14. PERMIT NO.		9. WELL NO. 42-1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4860' GR.		10. FIELD AND POOL, OR WILDCAT ANETH	
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TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON\* ☐

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

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FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT\* ☐

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Amendment to 13 3/8" conductor pipe cement job reported 4/17/85.  
Cement circulated to surface.

18. I hereby certify that the foregoing is true and correct

SIGNED

*John Alexander*

TITLE

Vice President

DATE

4/24/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

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\*See Instructions on Reverse Side

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Drilled 7 7/8" hole to t.d. of 5840' on 4/27/85. Ran open hole logs.  
Intend to plug well as follows with class "B" cement:

50 cu.ft. 5534' - 5434'  
55 cu.ft. 4640' - 4540'  
70 cu.ft. 2704' - 2604'  
48 cu.ft. 1527' - 1427'  
18 cu.ft. 50' - 0'

A dry hole marker will be installed.

ACCEPTED BY THE STATE  
OF UTAH DIVISION  
OIL, GAS, AND MINERAL

DATE: 5/8/85  
BY: John R. Bura

18. I hereby certify that the foregoing is true and correct

SIGNED

John Alexander

TITLE Vice President

DATE 4/28/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRII  
(Other instruction  
verse side)

17E  
3 re

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Budget Bureau No. 1004-0135  
Expires August 31, 1985

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4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1530' FNL & 550' FEL		8. FARM OR LEASE NAME NAVAJO TRIBAL	
14. PERMIT NO.		9. WELL NO. 42-1	
15. ELEVATIONS (Show whether DP, ET, GR, etc.) 4860 GR.		10. FIELD AND POOL, OR WILDCAT ANETH	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 1-41S-22E	
		12. COUNTY OR PARISH San Juan	
		13. STATE Utah	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
(Other) ☐

PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
ABANDON\* ☐  
CHANGE PLANE ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐  
FRACTURE TREATMENT ☐  
SHOOTING OR ACIDIZING ☐  
(Other) ☐

REPAIRING WELL ☐  
ALTERING CASING ☐  
ABANDONMENT\* ☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) \*

Drilled to 5840' t.d. on 4/27/85. Ran open hole logs. Plugged well as follows with Class "B" cement:

5444 - 5544	51 cu.ft.
4563 - 4463	55 cu.ft.
2633 - 2733	70 cu.ft.
1418 - 1518	48 cu.ft.
0 - 50	18 cu.ft.

A dry hole marker was set. Job complete 4/29/85.

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE: 5/8/85

BY: John R. Baya

18. I hereby certify that the foregoing is true and correct

SIGNED

*John Alexander*

TITLE Vice President

DATE 4/30/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐  
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. ENV. ☐ Other ☐

RECEIVED

2. NAME OF OPERATOR  
Chuska Energy Company

MAY 03 1985

3. ADDRESS OF OPERATOR  
P. O. Box 2118 Farmington, N.M. 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface 1530' N & 550' E  
At top prod. interval reported below same  
At total depth same

se ne GAS & MINING

14. PERMIT NO. 43-037-310401 DATE ISSUED 7-20-84

5. LEASE DESIGNATION AND SERIAL NO.

NOG 8303-1033

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

NAVAJO

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

NAVAJO TRIBAL

9. WELL NO.

42-1

10. FIELD AND POOL, OR WILDCAT

ANETH Gothic mesa

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA

1-41S-22E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

15. DATE SPUDDED 4/16/85 16. DATE T.D. REACHED 4/27/85 17. DATE COMPL. (Ready to prod.) P & A 18. ELEVATION (OF. RKB, RT, GE, ETC.)\* 4872' KB 19. ELEV. CASINGHEAD 4860'

20. TOTAL DEPTH, MD & TVD 5840' 21. PLUG, BACK T.D., MD & TVD Surface 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 0-5840 24. ROTARY TOOLS -0- CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* P & A 25. WAS DIRECTIONAL SURVEY MADE YES

26. TYPE ELECTRIC AND OTHER LOGS RUN DIL, CNL, DC, Microlog, Caliper, G.R. Sample Logs 27. WAS WELL CORRED NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48	81	17 1/2	118 cu.ft. Class "B" 2%	None
8 5/8	24	1477	12 1/4	Ca C12, 1/4 lb. Flocele cmt. to surface (See back side)	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A					N/A		

31. PERFORATION RECORD (Interval, size and number)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
None	

33.\* PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) P & A WELL STATUS (Producing or shut-in) P & A

DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO

FLOW, TUBING PRES. CASING PRESSURE CALCULATED 24-HOUR RATE OIL—BBL. GAS—MCF. WATER—BBL. OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED John Alexander TITLE Vice President DATE 4/30/85

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):					38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Cement 8 5/8" Surface Casing 884 cu.ft. Class "B", 4% gel, 2% CaCl <sub>2</sub> , 1/2 lb. Flocele/SK. 295 cu.ft. Class "B", 2% CaCl <sub>2</sub> , 1/4 lb. Flocele/SK Cement circulated to surface.					Chinle	1607	
					DeChelly	2646	
					Organ Rock	2738	
					Hermosa	4590	
					Upper Ismay	5506	
					Lower Ismay	5624	
					Gothic Shale	5669	
					Desert Creek	5708	
					Chimney Rock	5818	



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
4241 State Office Building  
Salt Lake City, UT 84114

RECEIVED

MAY 03 1985

DIVISION OF OIL  
GAS & MINING\*REPORT OF WATER ENCOUNTERED DURING DRILLING\*Well Name & Number NAVAJO TRIBAL 42-1Operator Chuska Energy Company Address P. O. Box 2118, Farmington, N.M. 87499Contractor Four Corners Drlg. #9 Address P. O. Box 1067, Farmington, N.M. 87499Location SE 1/4 NE 1/4 Sec. 1 T. 41S R. 22E County San JuanWater Sands

	<u>Depth</u>	<u>Volume</u>	<u>Quality</u>
	From To	Flow Rate or Head	Fresh or Salty
1.	None Encountered		
2.			
3.			
4.			
5.			

(Continue on reverse side if necessary)

Formation TopsRemarks

- NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
- (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

TIME STAT. UNITS SYSTEM/PERIOD		CHUSKA ENERGY COMPANY Navajo Tribal #42-1				FORMATION TOPS		
AGE	AGE	GROUP	FORMATION	MEMBER	ZONE	SAMPLE TOP	ELECTRIC TOP	FROM SEA LEVEL
PERMIAN /	WOLFCAMP	CUTLER GROUP						
	VIRGIL		RICO FORMATION					
		HERMOSA GROUP						
	MISSOURI		HONAKER TRAIL FORMATION					
	DES MOINES		PARADOX FORMATION					
			UPPER MEMBER					
			ISMAY ZONE					
			UPPER			5484'	5506'	(-639')
			LOWER			5590'	5624'	(-752')
			GOTHIC SHALE			5620'	5669'	(-797')
			DESERT CREEK POROSITY ZONE			5660'	5708'	(-836')
			MIDDLE MEMBER					
			CHIMNEY ROCK			5794'	5818'	(-946')
		DRILLER'S T.D. — 5840'						
		E-LOG T.D. — 5842'						

NOTE: TIME LINES  
DO NOT  
CORRELATE  
TO ROCK  
UNITS

PENNSYLVANIAN

**TERRA SERVICES, INC.**

1645 COURT PLACE, SUITE 218 • DENVER, COLORADO 80202  
303/534-2871

May 3, 1985

**RECEIVED**

**MAY 14 1985**

**DIVISION OF OIL  
GAS & MINING**

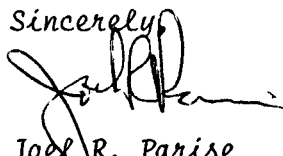
Mr. Norman Stout  
Utah Oil Division  
42141 State Office Building  
Salt Lake City, Utah 84111

Dear Mr. Stout:

Enclosed is your final copy of the Well Log covering:

Chuska Energy Company  
Navajo Tribal #42-1  
Sec. 1, T41S, R22E  
San Juan County, Utah

Should you have any questions pertaining to this well log  
or if we can be of assistance in any other matter, please  
do not hesitate to contact us.

Sincerely,  


Joel R. Parise  
Vice President  
Sales and Operations

JRP:mh

**TERRA SERVICES, INC.**

1645 COURT PLACE, SUITE 218 • DENVER, COLORADO 80202  
303/534-2871

CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1  
Sec. 1, T41S, R22E  
San Juan County, Utah

Prepared by:

TERRA SERVICES, INC.  
1645 Court Place, Suite 218  
Denver, Colorado 80202

Supervisors: Joel Parise  
Steve Szekula

Loggers: Eric Fagrelus  
Ted Gerhardy

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CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1

WELL DATA

OPERATOR

Chuska Energy Company  
Farmington, New Mexico

WELL

Navajo Tribal #42-1

LOCATION

Sec. 1, T41S, R22E  
1530' FNL and 550' FEL  
San Juan County, Utah

FIELD

Aneth

ELEVATION

Ground: 4860' (graded)  
Kelly Bushing: 4872' (est.)

CONTRACTOR

Four Corners Drilling Company  
Farmington, New Mexico

Toolpusher: Jack Guinn

COMPANY REPRESENTATIVES

John Alexander and Ralph Sloan  
Chuska Energy Company

GEOLOGIST

Henry Haven  
Chuska Energy Company

MUD COMPANY

Drilling Fluids, Inc.  
Farmington, New Mexico

Engineer: Charlie Gibbs

MUDLOGGING

Terra Services, Inc.  
1645 Court Place, Suite 218  
Denver, Colorado 80202

Engineers: Eric Fagrelus  
Ted Gerhardy

CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1

WELL DATA, continued

SPUD DATE

April 16, 1985

COMPLETED DRILLING DATE AND TOTAL DEPTH

T.D. was reached at 6:45 P.M. (MST) on April 27, 1985. Drillers T.D. 5840'. E-Log T.D. 5842'

DRILL PIPE

Drill Pipe: 4-1/2" at 16.6 lbs/ft, Grade E  
Tool Joint - O.D. 6"  
Thread Type - XH

Collars: O.D. 6-1/2" X I.D. 2-1/4"

MUD PUMPS AND TANK VOLUME

#1 Omega A-750 Stroke Length: 6" X 8"  
#2 Omega A-250 Stroke Length: 6" X 8"

SURFACE CASING

Drilled: 17-1/2" Conductor hole to 83', 12-1/4" hole to 1477'  
Casing: 1st String - 2 joints (83') of 13-3/8", 54 lbs/ft, set and  
cemented at a depth of 81'.

2nd String - 36 joints (1458') of 8-5/8", 24 lbs/ft, set and  
cemented at 1470'.

E-LOG COMPANY

Welex  
Farmington, New Mexico

CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1

BIT RECORD

<u>NO.</u>	<u>SIZE</u>	<u>TYPE</u>	<u>DEPTH RUN</u>	<u>TOTAL FOOTAGE</u>	<u>HOURS RUN</u>	<u>FEET? HOUR</u>
1	17-1/2'	HTC OSE3	Spud - 83'	83'	4-3/4	17.4
2	12-1/4"	STC SDS	83'- 748'	665'	11-1/2	57.9
3	12-1/4"	HTC S335	748'-1135'	387'	5-3/4	67.2
4	12-1/4"	HTC S335	1135'-1477'	342'	6	57.0
5	7-7/8"	HTC T-22	1477'-1967'	490'	16-1/4	30.1
6	7-7/8"	STC F2	1967'-3876'	1909'	58	32.9
7	7-7/8"	STC F2	3876'-4373'	487'	22	22.1
8	7-7/8"	RBI CJ-2	4373'-5448'	1075'	55-1/2	19.3
9	7-7/8"	Varel-V-537	5448'-5840'	394'	29-1/2	13.3



CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1

MUD RECORD

<u>DAY</u>	<u>DATE</u>	<u>DEPTH</u>	<u>WT</u>	<u>VIS</u>	<u>FIL</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	<u>Cl</u>	<u>SOLIDS</u>	<u>CA</u>	<u>FC</u>
1	4-17-85	82'	8.3	27	-	-	-	-	500	-	120	-
2	4-18-85	1480'	9.0	36	-	8	7	11.0	-	-	-	-
3	4-19-85	1500'	8.4	34	-	5	2	7.5	500	1	80	-
4	4-20-85	2489'	9.0	33	12	7	4	9.0	350	4	40	1/32
5	4-21-85	2975'	9.1	33	11.2	4	2	7.5	400	5	20	1/32
6	4-22-85	3759'	9.1	33	24.0	5	3	8.0	300	5	760	2/32
7	4-23-85	4258'	9.1	32	-	7	4	7.5	500	6	1200	-
8	4-24-85	4550'	9.2	34	20	18	16	9.0	450	-	720	2/32
9	4-25-85	5067'	9.1	32	20	5	2	10.0	500	5	120	2/32
10	4-26-85	5448'	9.1	33	16.0	6	4	11.0	450	5	40	2/32
11	4-27-85	5650'	10.1	35	8.0	12	5	10.5	450	12.8	Trace	1/32

SURVEY RECORD

<u>DATE</u>	<u>SURVEY DEPTH</u>	<u>SURVEY TYPE</u>	<u>DEVIATION</u>
	1866'	Dropped Tool	1-1/2°
	1967'	Dropped Tool	1-1/4°
4-20-85	2178'	Dropped Tool	1°
4-20-85	2365'	Dropped Tool	1°
4-21-85	2866'	Dropped Tool	1/2°
4-22-85	3366'	Dropped Tool	1/2°
4-22-85	3836'	Dropped Tool	1/4°
4-23-85	4373'	Dropped Tool	1/4°
4-25-85	4864'	Dropped Tool	1°
4-26-85	5364'	Dropped Tool	3/4°
4-26-85	5448'	Dropped Tool	1/4°

CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1

DRILLING PARAMETERS

<u>INTERVAL</u>	<u>1000# WOB</u>	<u>RPM</u>	<u>PP</u>	<u>SPM</u>
4373'-4530'	40	70	1600	102
4530'-4870'	40	65	1600	101
4870'-5020'	40	65	1650	102
5020'-5255'	40	65	1650	102
5255'-5320'	40	65	1650	102
5320'-5440'	40	65	1650	102
5440'-5576'	40	65	1650	102
5576'-5640'	40	65	1650	102
5640'-5735'	40	65	1800	102
5735'-5840'	40	65	1800	102

CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1

FORMATION SUMMARY

The primary objective of the Navajo Tribal #42-1 well, located 1530' from the North line and 550' from the East line of Section 1, Township 41 South, Range 22 East, San Juan County, Utah was drill through, and analyze possible hydrocarbon shows associated with the Ismay and Desert Creek Zones of the Pennsylvanian Aged Paradox Formation. Specific zones of interest were the Lower Ismay and Lower Desert Creek porosity units. A secondary zone of interest was the Upper Ismay unit.

Terra Services was on location, rigged up, and logging at 1:15 A.M. (MST) on April 24, 1985 at a depth of 4400' (+472') within the Permian Aged Cutler Group (undifferentiated). The Navajo Tribal #42-1 well was completed at a depth of 5842' (-970') within the Chimney Rock Zone of the Pennsylvanian Aged Paradox Formation. The logging unit was released at 12:00 P.M. (MST) on April 28, 1985 after electric logs had been run.

FORMATION EVALUATION

A. PERMIAN

I. Cutler Group

a. Rico Formation

Electric Log Top: Not picked

Thickness: Indeterminable

Average Penetration Rate: 3.0 min/ft or 20 ft/hr

The early Permian Rico Formation of the Cutler Group was the first formation encountered during mudlogging procedures on the Navajo Tribal 42-1 well. The Rico Formation represents the final phase of the Permian Cutler Group. Rico deposition began with predominantly marine conditions, grading upward into non-marine conditions. The time line separating Permian and Pennsylvanian strata lies within the Rico Formation in much of the Paradox Basin.

Lithologies within the Rico Formation generally consist of shale, interbedded with gray limestones, sandstone lenses, and silty transitions.

The shale is medium brown to reddish brown to variously colored, mottled and partially striated purple, light green, light gray and pink spots. Physical texture is blocky, earthy, silty, slightly calcareous, trace of mica, hematiferous, and moderately firm.

The limestone is white to buff to light brown to light gray, cryptocrystalline, trace of sucrosic microfossil molds, grainy, slightly argillaceous, trace of microfractures, lithically dense, tight intercrystalline porosity.

The siltstone is medium brown-reddish brown, blocky, earthy, trace of very fine grained sandstone grains, calcareous, slightly micaceous and moderately firm.

FORMATION EVALUATION, continued

The sandstone lenses are white to light gray, very fine - fine grain-  
ed, moderately to well sorted, subrounded to subangular, calcareous,  
clean, firm. The sandstone lenses are generally thin (approximately 2'  
thick), showing an interbedded relationship with shale and siltstone.

Gas and Sample Show(s): No gas or sample shows were encountered within  
the Rico Formation. Background gas remained steady at 2 units throughout  
the Rico Formation. Methane was the only constituent gas encountered, and  
remained steady at 2 units throughout.

II. Hermosa Group

a. Honaker Trail Formation

Electric Log Top: Not picked

Thickness: Undeterminable

Average Penetration Rate: 3 min/ft, 20 ft/hr

The Honaker Trail Formation is the uppermost formation in the Pennsyl-  
vanian Hermosa Group. The Honaker Trail Formation represents marginal  
marine and carbonate shelf facies within the Paradox Basin. Carbonate  
deposition increases in the lower portion of the Honaker Trail Formation.  
Lithologies within the Honaker Trail Formation range from predominantly  
shale, siltstone and sandstone lenses with interbedded limestone in the  
upper formation, to the dominant limestone facies in the lower formation.

The shale is reddish brown to medium brown with traces of mottled  
light gray and pink spots. The physical properties are blocky, earthy,  
slightly silty, calcareous, and moderately firm. Shale comprises approxi-  
mately 70% of the vertical section in the Honaker Trail Formation.

The siltstone is medium brown to reddish brown, blocky, earthy, traces  
of very fine sandstone grains, slightly calcareous, micaceous, and moder-  
ately firm. Siltstone comprises approximately 15% of the vertical section  
in Honaker Trail Formation in the Navajo Tribal 42-1 well.

FORMATION EVALUATION, continued

Two separate sandstone lenses were encountered in the Honaker Trail Formation. The sandstone is white, fine-grained, well sorted, subrounded, limy matrix, calcareous, very slightly argillaceous, and firm. These lenses occurred in the intervals from 5060'-5064' and 5298'-5304'. The penetration rate broke from 3 min/ft to 2 min/ft while drilling the sandstone. No shows were encountered within the sandstone lenses.

The limestone is white to light gray, cryptocrystalline, slightly argillaceous, dolomitic in part, dense, hard, tight intercrystalline porosity. The degree of dolomitization increases in the lower portion of the Honaker Trail Formation. Overall, limestone comprises approximately 15% of the entire Honaker Trail Formation in the vertical section of the Navajo Tribal #42-1 well.

Gas and Sample Show(s): The lower portion of the Honaker Trail Formation produced two separate gas shows. These shows were encountered within the following intervals: 5198'-5202' and 5230'-5234'.

Interval

5198'-5202'

<u>Before Peak</u> 4400'-5198'	<u>During Peak</u> 5198'-5202'	<u>After Peak</u> 5202'-5230'
Drill Rate: 3 min/ft	Drill Rate: 3 min/ft	Drill Rate: 3 min/ft
Total: 2 Units	Total: 23 Units	Total: 7 Units
C1: 4 Units	C1: 26 Units	C1: 12 Units
C2: -	C2: 16 Units	C2: 2 Units
C3: -	C3: 6 Units	C3: Trace
C4: -	C4: Trace	C4: Trace

FORMATION EVALUATION, continuedInterval

5230'-5234'

<u>Before Peak</u> 5218'-5230'	<u>During Peak</u> 5230'-5234'	<u>After Peak</u> 5234'-5545'
Drill Rate: 2.5 min/ft	Drill Rate: 2.5 min/ft	Drill Rate: 3 min/ft
Total: 7 Units	Total: 45 Units	Total; 8 Units
C1: 12 Units	C1: 40 Units	C1: 7 Units
C2: 2 Units	C2: 30 Units	C2: 3 Units
C3: 1 Unit	C3: 8 Units	C3: 1 Unit
C4: Trace	C4: 2 Units	C4: Trace

The two shows within the Honaker Trail Formation were liberated from an interbedded siltstone/shale sequence (see above for lithology descriptions). No fluorescence or cut was obtained from the show samples.

b. Paradox Formation

The Paradox Formation is the target formation of the Navajo Tribal #42-1 well. The Paradox Formation is the second formation encountered within the Pennsylvanian Hermosa Group. The contact shared by the Honaker Trail Formation and the Paradox Formation marks a regional disconformity. This time line is recognized throughout the Paradox Basin, (NE). The Paradox Formation is recognized as a thick evaporative sequence of interbedded salt, gypsum, and anhydrite. Shelfward within the basin (SW), the Paradox Formation grades from basin dominated evaporites (NE) to black euxinic shale, minor reddish brown shale, biostromal limestone, dolomite, and occasional sandstone units.

The black shale is easily recognized as blocky to slightly platy, ~~earthy~~ to sooty, slightly calcareous, carbonaceous and moderately firm.

The reddish brown shales are blocky, earthy, slightly silty, calcareous and moderately firm.



FORMATION EVALUATION, continued

The limestone is light gray to buff colored, cryptocrystalline, traces of sucrosic recrystallization, partial dolomitization, grainy, slightly argillaceous, trace of microfractures, tight intercrystalline porosity, and hard. Limestone occurring within show zones showed dull yellow hydrocarbon fluorescence, traces of pinpoint live oil stain, and a very slight light yellow cut.

Sandstone is a minor constituent of Paradox Formation lithology. When encountered, it occurred as white to very light brown, fine grained, subrounded, well-sorted, slightly argillaceous, limy matrix, calcareous, predominantly clean, hard. Drilling breaks associated with the sandstone units occurred at 5616'-5620', and 5708'-5710'. The drilling rate broke from 3 min/ft to 2.5 min/ft and 2.5 min/ft to 2 min/ft respectively.

(1)	<u>Upper Member</u>	<u>E-Log Top</u>	<u>Sea Level</u>	<u>Drill Rate</u>
(a)	Ismay Zone			3 min/ft
	i. Upper	5506'	-639'	
	ii. Lower	5624'	-752'	
(b)	Gothic Shale	5669'	-797	4.5 min/ft
(c)	Desert Creek	5708'	-836'	4.0 min/ft
(d)	Chimney Rock	5818'	-946'	8.0 min/ft

The Upper Member of the Pennsylvanian Paradox Formation contains the two primary pay zones in the Ismay and Desert Creek Zones.

(a) Ismay Zone

The Ismay Zone is predominantly comprised of dark shales interbedded with limestone and dolomitic limestone (as described above). The Ismay Zone is divided into an Upper and Lower section. Both sections of the Ismay produced shows.

FORMATION EVALUATION, continued

i. Upper Ismay

Show Interval: 5545'-5551'

<u>Before Peak</u> 5360'-5545'	<u>During Peak</u> 5545'-5551'	<u>After Peak</u> 5551'-5560'
Drill Rate: 3 min/ft	Drill Rate: 2.5 min/ft	Drill Rate: 3.5 min/ft
Total: 5 Units	Total: 80 Units	Total: 8 Units
C1: 8 Units	C1: 88 Units	C1: 10 Units
C2: 2 Units	C2: 68 Units	C2: 6 Units
C3: Trace	C3: 40 Units	C3: 6 Units
C4: -	C4: 8 Units	C4: Trace

ii. Lower Ismay

Show Interval: 5649'-5653'

<u>Before Peak</u> 5560'-5649'	<u>During Perak</u> 5649'-5653'	<u>After Peak</u> 5653'-5660'
Drill Rate: 4.5 min/ft	Drill Rate: 2.5 min/ft	Drill Rate: 4.5 min/ft
Total: 6 units	Total: 80 Units	Total: 8 Units
C1: 8 Units	C1: 96 Units	C1: 15 Units
C2: 4 Units	C2: 48 Units	C2: 9 Units
C3: 2 Units	C3: 48 Units	C3: 5 Units
C4: 2 Units	C4: 12 Units	C4: 2 Units

Special attention to electric log data should accompany any analysis of the Ismay Zone. The zone appears tight from mudlogging data.

(b) Gothic Shale

Separating the Ismay and Desert Creek Zones is the Gothic Shale. The Gothic Shale is first black shale zone encountered in the Paradox Formation (see lithology description above). Within the Gothic Shale, background gas climbed to a peak at 5690'. No significant shows were encountered, although background gas was substantial.

CHUSKA ENERGY COMPANY  
Navajo Tribal #42-1

FORMATION EVALUATION, continued

Total: 56 Units

C1: 88 Units

C2: 52 Units

C3: 19 Units

C4: 4 Units

(c) Desert Creek

The Desert Creek Zone is the lowest and most promising pay zone in the Navajo Tribal #42-1 well. The Desert Creek Zone is comprised of shale, dolomitic limestone, algal limestone and anhydrite. A 6' anhydrite section marks the top of the Desert Creek Zone. Two drilling breaks were encountered within the Desert Creek Zone, each liberating gas. These drilling breaks were encountered at 5760'-5774' and 5792'-5808'.

Interval: 5760'-5774'

<u>Before Peak</u> 5746'-5760'	<u>During Peak</u> 5760'-5774'	<u>After Peak</u> 5774'-5790'
Drill Rate: 5 min/ft	Drill Rate: 3.5 min/ft	Drill Rate: 4.5 min/ft
Total: 10 Units	Total: 54 Units	Total: 20 Units
C1: 12 Units	C1: 90 Units	C1: 24 Units
C2: 10 Units	C2: 50 Units	C2: 22 Units
C3: 5 Units	C3: 30 Units	C3: 12 Units
C4: 2 Units	C4: 8 Units	C4: 2 Units

The lowest and best developed porosity zone occurred from 5792'-5808'.

Interval: 5792'-5808'

<u>Before Peak</u> 5790'-5792'	<u>During Peak</u> 5742'-5808'	<u>After Peak</u> 5808'-5840'
Drill Rate: 7.5 min/ft	Drill Rate: 3.5 min/ft	Drill Rate: 7.5 min/ft
Total: 20 Units	Total: 100 Units	Total: 10 Units
C1: 24 Units	C1: 136 Units	C1: 20 Units
C2: 22 Units	C2: 120 Units	C2: 12 Units
C3: 12 Units	C3: 64 Units	C3: 5 Units
C4: 2 Units	C4: 16 Units	C4: 2 Units

FORMATION EVALUATION, continued

(2) Middle Member

(d) Chimney Rock

Below the Desert Creek Zone of the Upper Member of the Paradox Formation of the Pennsylvanian Hermosa Group is the Chimney Rock Zone of the Middle Member. The Chimney Rock Zone is a black shale sequence, similar to the Gothic Shale (see Lithology description above. The Navajo Tribal #42-1 well was completed at an electric log depth of 5842' (driller T.D. 5840') within the Chimney Rock Zone. No shows were encountered within the Chimney Rock Zone.

CONCLUSION:

The most favorable zones for oil and gas recovery are found within the Ismay Zone (5545'-5551', 5649'-5653'), and the Desert Creek Zone (5760'-5774', 5792'-5808'). Porosity and resistivity logs should be closely examined for further reservoir analysis. Formation tightness is a potential problem within the Ismay Zone.

SHOW REPORT

SHOW NO. 1            5200'-5204'

Lithology: Type - Trace Limestone, Shale, Siltstone

                  %        -            10                    70            20

Stain: None

% in Total Cuttings: None

Stain on Fracture Faces: None

Fluorescence: Color - None

Cut (Chlorothene): None

PERIOD	MUD GAS UNITS	C1	C2	C3	C4
Before	2-4	4	Trace		
During	22	26	16	6	Trace
After	10	14	6	2	Trace

Recognized by: ETG                    6:30 P.M.    4-25-85

Called: Henry Haven

REMARKS: Lithology: Shale-brown, gray green, blocky, earthy, silty,  
slightly calcareous, mica, medium firm, no fluoescence or cut.

Siltstone, brown, blocky, earthy, trace very fine grained sandstone grains,  
calcareous, mica, medium firm.

Limestone - white, buff, cream, cryptocrystalline, sucrosic in part,  
very slightly argillaceous, predominantly clean, creamy in part, dolomitic  
in part, firm to hard, trace chert.

SHOW REPORT, continued

SHOW NO. 2 5230'-5236'

Lithology: Type - Limestone, Shale, Siltstone

% - 10 70 20

Stain: None

% in Total Cuttings: None

STain on Fracture Faces: None

Fluorescence: Color - None

Cut (Chlorothene): None

PERIOD	MUD GAS UNITS	C1	C2	C3	C4
Before	10	14	6	2	Trace
During	46	46	30	8	2
After	8	12	4	2	Trace

Recognized by: ETG 7:30 P.M. 5-25-85

Called: Henry Haven

REMARKS: Lithology: Shale, brown, gray green, blocky, earthy, silty, slightly calcareous, mica, medium firm.

Siltstone, medium brown, blocky, earthy, trace very fine sandstone grains, slightly calcareous, mica, medium firm.

Limestone, white, buff, cream, cryptocrystalline, sucrosic in part, very slightly argillaceous, predominantly clean, grainy in part, dolomitic in part, firm to hard, trace chert.

SHOW REPORT, continued

SHOW REPORT NO. 3      5542'-5544'

Drilling Break: 5542'-5544'

Lithology: Type - Limestone, Shale

%      -      40              60

Porosity: (Matrix) Est. %: 5-10% - Fractured

(Fracture) Evidence for fracturing: Mic. Frac. in part.

Stain: Patchy, dark, "live".

% in Total Cuttings: 10%; % in Prob. Reservoir Lithology: 1%+

Stain on Fracture Faces: Yes

Fluorescence: Color - light yellow to dull gold; % in Total Cuttings: 10%

Cut (Cholorothene): Slow bleeding light yellow cut.

PERIOD	MUD GAS UNITS	C1	C2	C3	C4
Before	8	8	4	Trace	
During	80	88	68	40	8
After	10	8	4	2	

Recognized by: ETG              7:30 P.M.      4-26-85

Called Henry Haven              7:30 P.M.      4-26-85

REMARKS: Lithology - Shale, medium to dark gray, brown, platy, earthy, slightly silty and trace mica, medium firm.

Limestone, light gray, buff, microcrystalline, trace sucrosic, grainy, slightly argillaceous, trace fracturing, tight porosity, trace microfossils, trace dolomitic, yellow fluorescence, trace of oil stain, very slight light yellow cut, hard.

SHOW REPORT, continued

SHOW REPORT NO. 4            5650'-5652'

Drilling Break: 5650'-5652'

Lithology: Type: Limestone, Shale

                  %    :        90        10

Stain: Patchy, dark, "live".

                  % in Total Cuttings: 10%

                  Stain on Fracture Faces: Some

Fluorescence: Color - light yellow; % in Total Cuttings: 10%

Cut (Chlorothene): Light yellow, white

PERIOD	MUD GAS UNITS	C1	C2	C3	C4
Before	8	8	6	4	2
During	80	96	48	48	12
After	26	30	20	10	4

Recognized by: EF                            2:00 A.M.            2-27-85

Called: Henry Haver                        2:00 A.M.            2-27-85

REMARKS: Lithology: Limestone, white, gray, cryptocrystalline, clear, slightly sucrosic in part, fair to poor intercrystalline porosity, trace microfracturing, dull yellow fluorescence, weak streaming light yellow cut, trace oil stain, firm.

Shale, black, blocky, sooty, silky, calcareous, carbonaceous, trace mica, firm, no fluorescence or cut.



SHOW REPORT, CONTINUED

SHOW REPORT NO. 5                      5770'-5776'

Drilling Break: 5770'-5776'

Lithology: Type - Limestone, Shale

                  %        -        90                      10

Stain - Patchy, dark, "live"

                  % in Total Cuttings: 10%

                  Stain on Fracture Faces: Some

Fluorescence: Color - Light Yellow - white; % in Total Cuttings: 10%

Cut (Chlorothene): Light yellow-white

PERIOD	MUD GAS UNITS	C1	C2	C3	C4
Before	22	36	26	14	2
During	54	90	50	30	8
After	20	30	24	14	2

Recognized by: ETG                      1:00 P.M.                      2-27-85

Called: Henry Haven                      1:00 P.M.                      2-27-85

REMARKS: Lithology - Limestone, light gray to light brown, microcrystal-  
line to cryptocrystalline, microsucrosic, slightly fractured, argillaceous,  
fair intercrystalline porosity, hard, yellow fluorescence, slightly oil  
stained, slight light yellow to white cut.

SHOW REPORT, continued

SHOW REPORT NO. 6      5794'-5796'

Drilling Break: 5794'-5996'

Lithology: Type - Limestone, Shale

%      -      80      20

Stain: Patchy, dark, "live"

% in Total Cuttings: 10%

Stain on Fracture Faces: Some

Fluorescence: Color - Light yellow-white; % in Total Cuttings: 10%

Cut (Chlorothene): Light yellow-white

PERIOD	MUD GAS UNITS	C1	C2	C3	C4
Before	20	28	20	10	2
During	60	84	72	44	12
After	20	52	44	24	4

Recognized by: ETG      2:00 P.M.      4-27-85

Called: Henry Haven      2:00 P.M.      4-27-85

REMARKS: Sandstone - Light brown, light gray, microcrystalline, micro-sucrosic, grainy, argillaceous, trace fossil fragments, trace microvugular porosity, poor to fair, intercrystalline porosity, trace oil staining, light yellow-white fluorescence, light yellow to white slow streaming milky cut.

Shale - Dark gray, black, blocky, earthy, silty, slightly calcareous, carbonaceous, firm, no fluorescence or cut.

SHOW REPORT, continued

SHOW REPORT NO. 7            5800'-5806'

Drilling Break: 5800'-5806'

Lithology: Type - Limestone, shale

                  %       -       90            10

Stain: Patchy, dark, "live"

                  % in Total Cuttings: 10-15%

                  Stain on Fracture Faces: Some

Fluorescence: Color - Light yellow-white;    % in Total Cuttings: 15-30%

Cut (Chlorothene): Light yellow-white, milky

PERIOD	MUD GAS UNITS	C1	C2	C3	C4
Before	20	36	26	14	2
During	100	136	120	64	16
After	40	50	44	30	6

Recognized by: ETG            2-30 P.M.            2-27-85

Called: Henry Haven            2:30 P.M.            2-27-85

REMARKS: Limestone, Light brown, light gray, microcrystalline, micro-sucrosic, grainy, argillaceous, trace fossil fragments, trace microvugular porosity, poor to fair intercrystalline porosity, trace oil staining, light yellow to white fluorescence, light yellow to white, slow streaming milky cut.

Shale, Black, blocky, earthy, silty, slightly calcareous, carbonaceous, firm, no fluorescence or cut.



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

May 29, 1985

Chuska Energy Company  
P. O. Box 2118  
Farmington, NM 87499

Gentlemen:

Re: WELL NO. NAVAJO TRIBAL #42-1 - Sec. 1, T. 41S, R. 22E.  
San Juan County, Utah - API NO. 43-037-31040.

According to the "Well Completion Report" submitted May 3, 1985 for the above referenced well this well is plugged and abandoned. This office has not received the "Sundry Notice" of subsequent abandonment on this well.

Please complete and return the enclosed Form OGC-1b, "Sundry Notices and Reports on Wells" as soon as possible but not later than June 10, 1985.

Thank you for your prompt attention to this matter.

Sincerely,

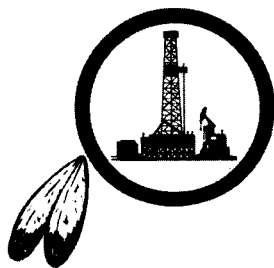
Pam Kenna  
Well Records Specialist

sb

Enclosures

cc: Dianne R. Nielson  
Ronald J. Firth  
John R. Baza  
File

0143S-18



# CHUSKA ENERGY COMPANY

P.O. BOX 2118 • FARMINGTON, N.M. 87499 • PHONE: (505) 326-5595

June 4, 1985

Division of Oil, Gas, and Mining  
355 W. North Temple  
3 Triad Center, Ste. 350  
Salt Lake City, Utah  
84180-1203

**RECEIVED**

**JUN 10 1985**

**DIVISION OF OIL  
GAS & MINING**

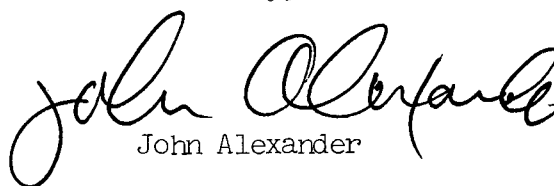
Attention: Pam Kenna

Re: Sundry Notice of Plugging No. 42-1 Navajo Tribal  
Chuska Energy Company

Dear Ms. Kenna:

Reference your letter May 29, 1985. Attached is the  
requested notice.

Sincerely,

  
John Alexander

JA/ch